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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/010,371	11/05/2001	Namik Hrle	DE92000035US1/2264P	4844

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SAWYER LAW GROUP  
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EXAMINER

ORTIZ, BELIX M

ART UNIT	PAPER NUMBER
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2175

DATE MAILED: 05/06/2004

3

Please find below and/or attached an Office communication concerning this application or proceeding.

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# Office Action Summary

Application No.

10/010,371

Applicant(s)

HRLE ET AL.

Examiner

Belix M. Ortiz

Art Unit

2175

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

  
DOV POPOVICI  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Specification*

1. The abstract of the disclosure is objected to because it consists of multiple paragraphs.

The abstract should be in narrative form and generally limited to a single paragraph. Correction is required. See MPEP § 608.01(b).

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

3. The specification is objected to because the arrangement of the disclosed application does not conform with 37 CFR 1.77(b).

Section headings appear in bold throughout the disclosed specification.

Section heading should not be bold faced. Appropriate corrections are required based on the guidelines provided below:

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4. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

#### **Arrangement of the Specification**

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or  
REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.)
- (e) BACKGROUND OF THE INVENTION.
  - (1) Field of the Invention.
  - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (f) BRIEF SUMMARY OF THE INVENTION.
- (g) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (h) DETAILED DESCRIPTION OF THE INVENTION.
- (i) CLAIM OR CLAIMS (commencing on a separate sheet).
- (j) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (k) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

***Claim Objections***

5. Claim 5 is objected to because of the following informalities: claim 5 is dependent from claim 5 (see page 13, line 10). For the purpose of examination, the examiner is making the assumption that claim 5 is dependent from claim 4. Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1-24 are rejected under 35 U.S.C. 102(e) as being anticipated by Ponnekanti (U.S. patent 6,606,626).

As to claim 1, Ponnekanti teaches a method for reducing lock contention of concurrent transactions on a plurality of rows of a table in a relational database system in response to a database query having a set of predicates (see column 2, lines 30-32; column 3, lines 1-9; column 3, lines 26-28; and column 20, lines 8-13), the method comprising the steps of:

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- (a) scanning all rows of the table within an access range determined by the query (see column 9, lines 59-62; column 9, lines 66-67; and column 10, lines 1-2);
- (b) evaluating each scanned row to determine whether the row satisfies the set of predicates (see column 10, lines 1-4); and
- (c) returning the row if it satisfies the set of predicates of the query (see column 3, lines 62-63).

As to claim 2, Ponnekanti teaches wherein the scanning step (a) further comprising the step of:

- (a1) accessing the rows of the table with uncommitted read semantics irrespective of current locks (see column 12, lines 46-49 and column 16, lines 53-56).

As to claim 3, Ponnekanti teaches wherein the step of evaluating (b) further comprises the steps of:

- (b1) evaluating each row to determine whether it satisfies the set of predicates of the query (see column 3, lines 2-7); and
- (b2) continuing the scan if the row does not satisfy the set of predicates of the query (see column 16, lines 42-44).

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As to claim 4, Ponnekanti teaches wherein the returning step (c) further comprises the steps of:

- (c1) requesting a lock on the row (see column 3, lines 46-50);
- (c2) suspending the scan, if the requested lock is refused (see column 4, lines 10-11);
- (c3) repeating the request for a lock and re-evaluating the row when the lock is permitted (see column 12, lines 52-54 and column 12, lines 61-67); and
- (c4) returning the row if the row still satisfies the set of predicates of the query (see column 3, lines 62-63).

As to claim 5, Ponnekanti teaches wherein the returning step (c) further comprises the step of:

- (c5) releasing the lock, skipping the row, and continuing the scan if the row no longer satisfies the set of predicates of the query (see column 16, lines 42-62).

As to claim 6, Ponnekanti teaches wherein the returning step (c) further includes the step of:

- (c1) returning the row as a result set (see column 3, lines 62-63).

As to claim 7, Ponnekanti teaches wherein the returning step (c) further includes the step of:

- (c1) returning the row if the row is a committed row (see column 15, lines 8-10).

As to claim 8, Ponnekanti teaches wherein the database query is a SQL statement (see column 1, lines 65-67).

As to claim 9, Ponnekanti teaches an apparatus for reducing lock contention of concurrent transactions on a plurality of rows of a table in a relational data base system in response to a database query having a set of predicates (see figure 1A; column 2, lines 30-32; column 3, lines 1-9; column 3, lines 26-28; and column 20, lines 8-13), comprising:

- (a) means for scanning all rows of the table within an access range determined by the query (see column 9, lines 59-62; column 9, lines 66-67; and column 10, lines 1-2);
- (b) means for evaluating each scanned row to determine whether the row satisfies the set of predicates (see column 10, lines 1-4); and
- (c) means for returning the row if it satisfies the set of predicates of the query (see column 3, lines 62-63).

As to claim 10, Ponnekanti teaches wherein means for the scanning further comprising:



means for accessing the rows of the table with uncommitted read semantics irrespective of current locks (see column 12, lines 46-49 and column 16, lines 53-56).

As to claim 11, Ponnekanti teaches wherein the means for evaluating further comprising:

means for evaluating each row to determine whether it satisfies the set of predicates of the query (see column 3, lines 2-7); and

means for continuing the scan if the row does not satisfy the set of predicates of the query (see column 16, lines 42-44).

As to claim 12, Ponnekanti teaches wherein the means for returning step further comprising:

means for requesting a lock on the row (see column 3, lines 46-50);

means for suspending the scan, if the requested lock is refused (see column 4, lines 10-11);

means for repeating the request for a lock and re-evaluating the row when the lock is permitted (see column 12, lines 52-54 and column 12, lines 61-67);  
and

means for returning the row if the row still satisfies the set of predicates of the query (see column 3, lines 62-63).

As to claim 13, Ponnekanti teaches wherein the means for returning step further includes means for releasing the lock, skipping the row, and continuing the scan if the row no longer satisfies the set of predicates of the query (see column 16, lines 42-62).

As to claim 14, Ponnekanti teaches wherein the row is returned as a result set (see column 3, lines 62-63).

As to claim 15, Ponnekanti teaches wherein the row returned is a committed row (see column 15, lines 8-10).

As to claim 16, Ponnekanti teaches wherein the database query is a SQL statement (see column 1, lines 65-67).

As to claim 17, Ponnekanti teaches a computer readable medium containing programming instructions for reducing lock contention of concurrent transactions on a plurality of rows of a table in a relational data base system in response to a database query having a set of predicates (see column 2, lines 30-32; column 3, lines 1-9; column 3, lines 26-28; column 6, lines 66-67; column 7, lines 1-9; and column 20, lines 8-13), the programming instructions for:

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- (a) scanning all rows of the table within an access range determined by the query (see column 9, lines 59-62; column 9, lines 66-67; and column 10, lines 1-2);
- (b) evaluating each scanned row to determine whether the row satisfies the set of predicates (see column 10, lines 1-4); and
- (c) returning the row if it satisfies the set of predicates of the query (see column 3, lines 62-63).

As to claim 18, Ponnekanti teaches wherein the scanning instruction (a) further comprising the instruction for:

- (a1) accessing the rows of the table with uncommitted read semantics irrespective of current locks (see column 12, lines 46-49 and column 16, lines 53-56).

As to claim 19, Ponnekanti teaches wherein the instruction for evaluating (b) further comprises the instruction for:

- (b1) evaluating each row to determine whether it satisfies the set of predicates of the query (see column 3, lines 2-7); and
- (b2) continuing the scan if the row does not satisfy the set of predicates of the query (see column 16, lines 42-44).

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As to claim 20, Ponnekanti teaches wherein the returning step instruction

(c) further comprises the instruction for:

- (c1) requesting a lock on the row (see column 3, lines 46-50);
- (c2) suspending the scan, if the requested lock is refused (see column 4, lines 10-11);
- (c3) repeating the request for a lock and re-evaluating the row when the lock is permitted (see column 12, lines 52-54 and column 12, lines 61-67); and
- (c4) returning the row if the row still satisfies the set of predicates of the query (see column 3, lines 62-63).

As to claim 21, Ponnekanti teaches wherein the returning instruction (c)

further comprises the instruction for:

- (c5) releasing the lock, skipping the row, and continuing the scan if the row no longer satisfies the set of predicates of the query (see column 16, lines 42-62).

As to claim 22, Ponnekanti teaches wherein the returning instruction (c)

further includes the instruction for:

- (c1) returning the row as a result set (see column 3, lines 62-63).

As to claim 23, Ponnekanti teaches wherein the returning instruction (c)

further includes the instruction for:

(c1) returning the row if the row is a committed row (see column 15, lines 8-10).

As to claim 24, Ponnekanti teaches wherein the database query is a SQL statement (see column 1, lines 65-67).

***Conclusion***


8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Belix M. Ortiz whose telephone number is 703-305-7605. The examiner can normally be reached on Monday-Friday 9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dov Popovici can be reached on 703-305-3830. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

bmo

April 21, 2004

  
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